

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018809**Date Inspected:** 19-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

**OBG # TRIAL ASSEMBLY YARD (CB16)**

This QA Inspector along with QA Inspector Mr.Manjunath S Math performed dimensional joint survey inspection to verify the gap between the skin plates of Cross Beam to the Segment 11DW FL3. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The cross beam and panel point designations were as follows:

CB16- PP 104 and PP 106

**OBG # TRIAL ASSEMBLY YARD (12AE-12BE)**

This QA Inspector along with QA inspector Mr.Manjunath S Math performed the dimensional survey inspection to verify the root gap and offset on the transverse splice weld of segment 12AE and segment 12BE. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 12AE to Segment 12BE – PP 112 to PP 113

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This QA Inspector randomly observed the following work in progress:

### OBG # TRIAL ASSEMBLY YARD (12AE-12BE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (4G) overhead position on bottom and side panel piece mark no. SEG3001A. The location was the complete joint penetration groove weld joining side and bottom panel of segment 12AE at work point E4. The welder ID was 053871. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (1G) overhead position on bottom and side panel piece mark no. SEG3002A. The location was the complete joint penetration groove weld joining side and bottom panel of segment 12BE at work point E4. The welder ID was 053871. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

### OBG # TRIAL ASSEMBLY YARD (12AE-12BE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 004 in the (4G) overhead position on bottom and side panel piece mark no. SEG3001A. The location was the complete joint penetration groove weld joining side and bottom panel of segment 12AE at work point E3. The welder ID was 040320. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 004 in the (4G) overhead position on bottom and side panel piece mark no. SEG3002A. The location was the complete joint penetration groove weld joining side and bottom panel of segment 12BE at work point E3. The welder ID was 040320. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

### OBG # TRIAL ASSEMBLY YARD (12AW-12BW)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 001 in the (3G) vertical position on side panel piece mark no. OBW12D. The location was the transverse splice weld joining segment 12AW and 12BW at work point W1 to W3. The welder ID was 040609. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-ESAB.

### OBG # TRIAL ASSEMBLY YARD (12AW-12BW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 002 in the (4G) overhead position on side panel piece mark no. OBW12D. The location was the transverse splice weld joining segment 12AW and 12BW at work point W4 to W6. The welder ID was 040611. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 002 in the (4G) overhead position on side panel piece mark no. OBW12D. The location was the transverse splice weld joining segment 12AW and 12BW at work point W4 to W6. The welder ID was 040656. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

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The QA Inspector observed the welding operation per the SMAW process on weld joint no. 003 in the (4G) overhead position on corner assembly side panel piece mark no. OBW12D. The location was the transverse splice weld joining segment 12AW and 12BW at work point W4 to W6. The welder ID was 046709. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

For additional information please reference the pictures below:



### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Manikandan,Murugan	Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art	QA Reviewer
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